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10/541,218	06/30/2005	Satoshi Matsuura	2005-0981A	5809

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KEATON, SHERROD L

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	10/541,218	MATSUURA ET AL.
	Examiner	Art Unit	
	sherrod keaton	2174	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 June 2005*.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-27* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-27* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *30 June 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☒ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date *9-15-2005, 6-30-2005*.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application

6)☐ Other: _____ .

DETAILED ACTION

This action is in response to the original filing of June 10, 2005. Claims 1-27

are pending and has been considered below:

Claim Rejections - 35 USC § 103

1.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

2.   Claims 1-3, 19-21 and 26-27 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Anttila (6721542 B1) in view of Arcuri (6232972 B1).

Claims 1, 19 and 27: Anttila discloses an application program prediction method,

terminal and program by which a mobile terminal installed with two or more application

programs predicts an application program that a user is likely to use, said method

comprising:

an application executing step of selecting and executing one of the application

programs (Column 7, Lines 7-17);

a location detecting step of detecting a location where the mobile terminal exists when the application program is executed in said application executing step (Column 7, Lines 7-17);

But does not disclose a usage history creating step of creating a usage history of the application program executed in said application executing step, in association with the location detected in said location detecting step; a predicting step of specifying, based on the usage history, an application program corresponding to a predetermined location and presenting the specified application program as a prediction result. However Arcuri discloses a method for dynamically displaying controls in a toolbar and further discloses displaying controls based on usage (Column 4, Lines 48-58; Column 9, Lines 15-41). Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to have usage history also decide possible application prediction in Anttila as taught by Arcuri. One would have been motivated to have the dual prediction method to help quickly facilitate choices and save navigation time.

Claims 2 and 20: Anttila and Arcuri disclose an application program prediction method as in claim 1 above, and Anttila further disclose wherein said predicting step includes: a current location detecting step of detecting a current location of the mobile terminal (Column 4, Lines 7-15), an application program corresponding to the current location detected in said current location detecting step; and a presenting step of presenting the

application program specified in said specifying step, as a prediction result of an

application program that the user is likely to use currently (Column 7, Lines 7-17).

Arcuri discloses a specifying step of specifying, based on the usage history (Column 4,

Lines 48-58; Column 9, Lines 15-41).

Therefore it would have been obvious to one having ordinary skill in the art at the time

of the invention to have usage history also decide possible application prediction in the

modified Anttila as taught by Arcuri. One would have been motivated to have the dual

prediction method to help facilitate choices and save navigation time.

Claims 3 and 21: Anttila and Arcuri disclose an application program prediction method

as in claim 2 above, and further disclose said specifying step, a content corresponding

to the current location detected in said current location detecting step is further specified

based on the usage history, and in said presenting step, the content specified in said

specifying step is further presented as a content of the application program that the user

is likely to use currently.

Arcuri discloses wherein in said usage history creating step, the usage history is

created, the usage history including a name of the application program executed in said

application executing step and a content for the application program inputted by a user's

operation (Column 3, Lines 20-30) the system looks at the application last used to

determine controls. Therefore it would have been obvious to one having ordinary skill in

the art at the time of the invention to have usage history also include name of

application in modified Anittila as taught by Arcuri. One would have been motivated to

have the name of the application to provide detailed identification of the application

providing efficient system navigation.

Claims 18 and 26: Anttila and Arcuri disclose an application program prediction

method as in claims 1 and 19 above, and further disclose: a mode setting step of setting

an operation mode of the mobile terminal; a setting location detecting step of detecting

a location of the mobile terminal where the operation mode is set in said mode setting

step (Column 7, Lines 7-17); a setting history creating step of creating a setting history

of the operation mode set in said mode setting step, in association with the location

detected in said setting location detecting step; and a mode predicting step of specifying

an operation mode corresponding to a current location of the mobile terminal based on

the setting history, and presenting the set operation mode as a prediction result

(Column 4, Lines 48-58; Column 9, Lines 15-41). Anytime that the system has the

capability of performing an action it is in the mode.

3.   Claims 4-6 rejected under 35 U.S.C. 103(a) as being unpatentable over Anttila

(6721542 B1) in view of Arcuri (6232972 B1). as applied to claim 3 above, and further in

view of Gong (20030163311 A1).

Claim 4: Anttila and Arcuri disclose an application program prediction method as in

claim 3 above, but does not explicitly disclose a specifying step, when an e-mail is

specified as an application program corresponding to the current location detected in said current location detecting step, and in said presenting step, a prediction result is presented, the prediction result indicating that the e-mail is specified as the application program that the user is likely to use currently. However Gong discloses an intelligent social agent and further discloses the launch of an email for a user (Page 4, Paragraph 37). Anttila discloses starting up possible applications. Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to include email as a predicted application in the modified Anttila as taught by Gong. One would have been motivated to launch email to provide important everyday applications that the user may find useful.

Claim 5: Anttila, Arcuri and Gong disclose an application program prediction method as in claim 4, and Gong further discloses wherein in said specifying step, a destination of the e-mail is specified as a content corresponding to the current location detected in said current location detecting step, and in said presenting step, the destination is presented (Page 2, Paragraph 26). The system looks at all aspects of the email so when starting the program. Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to include a destination of the email in the modified Anttila as taught by Gong. One would have been motivated to include a destination to quicken the emailing process thereby improving efficiency of the user.

Claim 6: <u>Anttila, Arcuri and Gong</u> disclose an application program prediction method as

in claim 5, and <u>Gong</u> further discloses wherein in said specifying step, a template of a

text of the e-mail is specified as a content corresponding to the current location detected

in said current location detecting step, and in said presenting step, the template is

presented (Page 2, Paragraph 26). The system looks at all aspects of the email so

when starting the program. Therefore it would have been obvious to one having

ordinary skill in the art at the time of the invention to include a template of the email in

the modified <u>Anttila</u> as taught by <u>Gong.</u> One would have been motivated to include a

template to quicken the email configuration thereby improving efficiency of the user

when using that application.

4.   Claims 7, 16, 22 and 24 are rejected under 35 U.S.C. 103(a) as being

unpatentable over <u>Anttila (6721542 B1)</u> and <u>Arcuri (6232972 B1)</u> as applied to claims 1,

7 and 22 above, and further in view of <u>Pearce (5754125)</u>.

Claims 7 and 22: <u>Anttila</u> and <u>Arcuri</u> disclose an application program prediction method

as in claim 1 above, and disclose a specifying step of specifying, based on the usage

history (<u>Arcuri</u>: Column 4, Lines 48-58; Column 9, Lines 15-41) but do not explicitly

disclose wherein said predicting step includes: a future location predicting step of

predicting a future location of the mobile terminal; an application program corresponding

to the future location predicted in said future location predicting step; and a presenting

step of presenting the application program specified in said specifying step, as a

prediction result of an application program that the user is likely to use in the future.

However <u>Pearce</u> discloses an automatic vehicle system and further discloses predictive

location (Column 2, Lines 1-7). Therefore it would have been obvious to one having

ordinary skill in the art at the time of the invention to have a future location predictor in

the modified <u>Anttila</u> as taught by <u>Pearce.</u> One would have been motivated to provide

future location to improve users ability to quickly interact with location specific

applications.

Claims 16 and 24: <u>Anttila, Arcuri and Pearce</u> disclose an application program

prediction method as in claims 7 and 22 above, wherein said future location predicting

step includes: a station specifying step of specifying a station where the mobile terminal

currently exists, through communication carried out between the mobile terminal and a

device placed in the station; and a retrieving step of retrieving, from a past route search

result, an arrival station corresponding to a departure station that is the station specified

in said station specifying step, and the arrival station retrieved in said retrieving step is

regarded as the future location of the mobile terminal. <u>Pearce</u> further discloses a unit

using a location system looking at when the position and velocity were generated and

predicting a position based on the movements (Page 3, Lines 1-30). Therefore it would

have been obvious to having ordinary skill in the art at the time of the invention to check

base location and predict an arrival area in the modified <u>Anttila</u> as taught by <u>Pearce.</u>

One would have been motivated to use the base location to provide a definite location

parameter when calculating prediction results this allows the system to produce more

accurate results.

5.   Claims 8, 9, 14, 15 and 23 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Anttila (6721542 B1), Arcuri (6232972 B1) and Pearce (5754125) as

applied to claim 7 above, and further in view of Horvitz (20030014491 A1).

Claims 8 and 23: Anttila, Arcuri and Pearce disclose an application program prediction

method as in claim 7 above, but do not explicitly disclose comprising a movement

history creating step of creating a movement history of the mobile terminal in

association with a calendar attribute, wherein in said future location predicting step, a

location corresponding to a calendar attribute indicating a time later than a current time

is specified based on the movement history, and the specified location is regarded as a

future location of the mobile terminal. However Horvitz discloses a method and

application of learning and inferring the periods of time and further discloses a calendar

system, which takes notes and tries to forecast location and available time openings

with accordance with the calendar (Page 3, Paragraph 33). Therefore it would have

been obvious to one having ordinary skill in the art at the time of the invention to provide

calendar forecast in the modified Anttila as taught by Horvitz. One would have been

motivated to provide the calendar forecast in order relate functions with predetermined events improving the prediction calculation.

Claim 9: Anttila, Arcuri, Pearce and Horvitz disclose an application program prediction method as in claim 8 above, wherein discloses the said usage history creating step, the usage history is created, the usage history including a name of the application program executed in said application executing step and a content for the application program inputted by a user's operation (Arcuri: Column 3, Lines 20-30), and discloses the said specifying step, a content corresponding to the future location predicted in said future location predicting step is further specified based on the usage history, and in said presenting step, the content specified in said specifying step is further presented as a content of the application program that the user is likely to use in the future (Pearce: Column 2, Lines 1-7).

Claim 14: Anttila, Arcuri, Pearce, Horvitz disclose an application program prediction method as in claim 8, wherein in said future location predicting step, a location at which the mobile terminal existed with the most frequency is specified based on the movement history, from among locations associated with the calendar attributes indicating the times later than the current time. Pearce also discloses the prediction based speed and direction movement (Page 2, Lines 1-7) and Horvitz discloses a using GPS in reference to time of day or a day of the week (Page 8, Paragraph 71). Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to use movement history and calendar attributes for predicting location in the modified Anttila

to time of day or a day of the week (Page 8, Paragraph 71). Therefore it would have

been obvious to one having ordinary skill in the art at the time of the invention to use

movement history and calendar attributes for predicting location in the modified Anttila

as taught by Pearce and Horvitz. One would have been motivated to use the movement

history and calendar to provide better system efficiency for making a prediction.

Claim 15: Anttila, Arcuri, Pearce, Horvitz disclose an application program prediction

method as in claim 8, wherein in said future location predicting step, a location to which

the mobile terminal moved next with the most frequency, starting from the current

location and the current time indicated by a current calendar attribute, is specified based

on the movement history. Pearce also discloses the prediction based speed and

direction movement and looks at possible other locations if the predicted location

passes the predetermined limit (Page 2, Lines 1-20) and Horvitz discloses a using GPS

in reference to time of day or a day of the week (Page 8, Paragraph 71). Therefore it

would have been obvious to one having ordinary skill in the art at the time of the

invention to use movement history to provide other locations and calendar attributes for

predicting location in the modified Anttila as taught by Pearce and Horvitz. One would

have been motivated to use the movement history and the calendar to provide better

system efficiency when making or redefining a prediction.

6.   Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over <u>Anttila</u>
<u>(6721542 B1)</u>, <u>Arcuri (6232972 B1)</u>, <u>Pearce (5754125)</u> and <u>Horvitz (20030014491 A1)</u>
as applied to claim 9 above, and further in view of <u>Duley (5459671)</u>.

Claim 10: <u>Anttila, Arcuri, Pearce and Horvitz</u> disclose an application program prediction

method as in claim 9 above however do not explicitly disclose a power detecting step of

detecting a remaining amount of power of the mobile terminal; a calculating step of

calculating an amount of power which is to be consumed when the application program

and the content specified in said specifying step are used; and a message presenting

step of presenting a message prompting to charge when the remaining amount of

power detected in said power detecting step is smaller than the amount of power

consumption calculated in said calculating step. However <u>Duley</u> discloses a

programmable battery controller and further discloses power monitoring and display of

warning messages (Column 4, Lines 9-21; Column 5, Lines 39-50). Therefore it would

have been obvious to one having ordinary skill in the art at the time of the invention to

include power monitoring and alert messages in the modified <u>Anttila</u> as taught by <u>Duley.</u>

One would have been motivated to have power management functions to improve user

operability of the system and not have terminal stop working in the middle of an

application.

7.　　　Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over <u>Anttila (6721542 B1)</u>, <u>Arcuri (6232972 B1)</u>, <u>Pearce (5754125)</u>, <u>Horvitz (20030014491 A1) and Duley (5459671)</u> as applied to claim 10 above, and further in view of <u>Salmimaa et al (20020160817)</u>.

Claim 11: <u>Anttila, Arcuri, Pearce, Horvitz and Duley</u> disclose an application program prediction method as in claim 10 above but do not explicitly disclose: a sending step of sending current location information indicating a current location of the mobile terminal to a predetermined apparatus via a communication network; an obtaining step of obtaining, from the predetermined apparatus, charging place information indicating a place where the mobile terminal can be charged, in the vicinity of the location indicated in the current location information; and a charging place presenting step of presenting the charging place based on the charging place information obtained in said obtaining step. However <u>Salmimaa</u> discloses a method and apparatus for displaying prioritized icons in a mobile display and further discloses displaying places of importance (e.g. gas stations or charging station) in reference to a geographical region (Page 1, Paragraph 9; Page 4, Paragraph 44). Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to inform the user of possible places of interest such as charging location in the modified <u>Anttila</u> as taught by <u>Salmimaa.</u> One would have been motivated to have this location information to tailor to the terminals specific needs for charging arrangements.

8.   Claim 12 rejected under 35 U.S.C. 103(a) as being unpatentable over <u>Anttila</u>

<u>(6721542 B1)</u>, <u>Arcuri (6232972 B1)</u>, <u>Pearce (5754125)</u> and <u>Horvitz (20030014491 A1)</u>

as applied to claim 9 above, and further in view of <u>Cantos (6529784 B1)</u>.

Claim 12: <u>Anttila, Arcuri, Pearce and Horvitz</u> disclose an application program prediction

method as in claim 9 above however do not explicitly disclose wherein the content is

distribution data to be distributed via a communication network, and said application

program prediction method further comprises: a judging step of judging whether or not

the mobile terminal holds a latest version of the distribution data specified in said

specifying step; and a presenting step of presenting a message for notifying that the

mobile terminal does not hold the latest version of the distribution data, when it is

judged in said judging step that the mobile terminal does not hold the latest version.

However <u>Cantos</u> discloses a system for monitoring computer systems and further

discloses a system determining if a new package is available to the system and sending

message that a package is available (Column 6, Lines 13-25). Therefore it would have

been obvious to one having ordinary in the art at the time of the invention to have alerts

for possible upgrades of the system in the modified <u>Anttila</u> as taught by <u>Cantos.</u> One

would have been motivated to have the alerts because they are a quick and efficient

way to notify the user of needed system changes.

9.   Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over <u>Anttila</u>

<u>(6721542 B1)</u>, <u>Arcuri (6232972 B1)</u>, <u>Pearce (5754125)</u>, <u>Horvitz (20030014491 A1)</u> and

Cantos (6529784 B1) as applied to claim 12 above, and further in view of Salmimaa et

al (20020160817).

Claim 13: Anttila, Arcuri, Pearce, Horvitz and Cantos disclose an application program

prediction method according to claim 12, further comprising: a sending step of sending

current location information indicating a current location of the mobile terminal to a

predetermined apparatus via a communication network; an obtaining step of obtaining,

from the predetermined apparatus, obtainment place information indicating a data

obtainment place where the mobile terminal can obtain the latest version of the

distribution data, in the vicinity of the location indicated in the current location

information; and an obtainment place presenting step of presenting the data obtainment

place based on the obtainment place information obtained in said obtaining step.

However Salmimaa discloses a method and apparatus for displaying prioritized icons in

a mobile display and further discloses displaying places of importance (e.g. Help Areas

or Product sales stores) in reference to a geographical region (Page 1, Paragraph 9;

Page 4, Paragraph 44). Therefore it would have been obvious to one having ordinary

skill in the art at the time of the invention to inform user of possible places of interest

such as store or area to get an update in the modified Anttila as taught by Salmimaa.

One would have been motivated to have this location information to tailor to the

terminals specific need to update the software of the device.

10.   Claims 17 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Anttila (6721542 B1), Arcuri (6232972 B1) and Pearce (5754125) as applied to

claims 7 and 22 above, and further in view of Gong (20030163311 A1).

Claims 17 and 25: Anttila, Arcuri and Pearce disclose an application program

prediction method as in claims 7 and 22 above, but do not explicitly disclose wherein

said future location predicting step includes: a route specifying step of specifying a route

on which the station where the mobile terminal currently exists is located, through

communication carried out between the mobile terminal and a device placed in the

station; and a retrieving step of retrieving, from a past e-mail history, a station which is

located on the route specified in said station specifying step, and the station retrieved in

said retrieving step is regarded as the future location of the mobile terminal. However

Gong discloses an intelligent social agent extracts information about the user from

context, which includes email to determine possible location (Page 2, Paragraph 26;

Page 3, Paragraph 29). Therefore it would have been obvious to one having ordinary

skill in the art at the time of the invention to use email history in helping predict location

in the modified Anttila as taught by Gong. One would have been motivated to use email

history to provide a definite location parameter when calculating prediction results this

allows the system to produce more accurate results.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sherrod Keaton whose telephone number is 571) 270-1697. The examiner can normally be reached on Mon. thru Fri. and alternating Fri. off (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, KRISTINE KINCAID can be reached on 571-272-4063. The fax phone number for the organization where this application or proceeding is assigned is 571-273-3800.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SLK

7-31-07

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